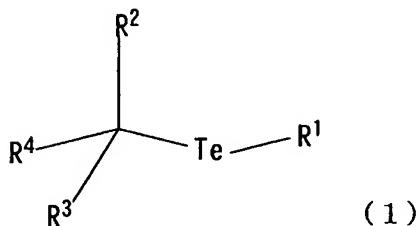


## CLAIMS

1. A process for producing a living radical polymer characterized in that a vinyl monomer is polymerized with use of an organotellurium compound represented by the formula (1), an azo type polymerization initiator and a ditelluride 5 compound represented by the formula (2)



wherein R<sup>1</sup> is C<sub>1</sub>-C<sub>8</sub> alkyl, aryl, substituted aryl or an aromatic heterocyclic group, R<sup>2</sup> and R<sup>3</sup> are each a hydrogen atom or C<sub>1</sub>-C<sub>8</sub> alkyl, and R<sup>4</sup> is aryl, substituted aryl, an 10 aromatic heterocyclic group, acyl, oxycarbonyl or cyano.



wherein R<sup>1</sup> is the same as above.

2. A living radical polymer obtainable by polymerizing a vinyl monomer with use of an organotellurium compound represented by the formula (1), an azo type polymerization initiator and a ditelluride compound represented by the 5 formula (2).

3. A mixture of an organotellurium compound represented by the formula (1), an azo type polymerization initiator and a ditelluride compound represented by the formula (2).